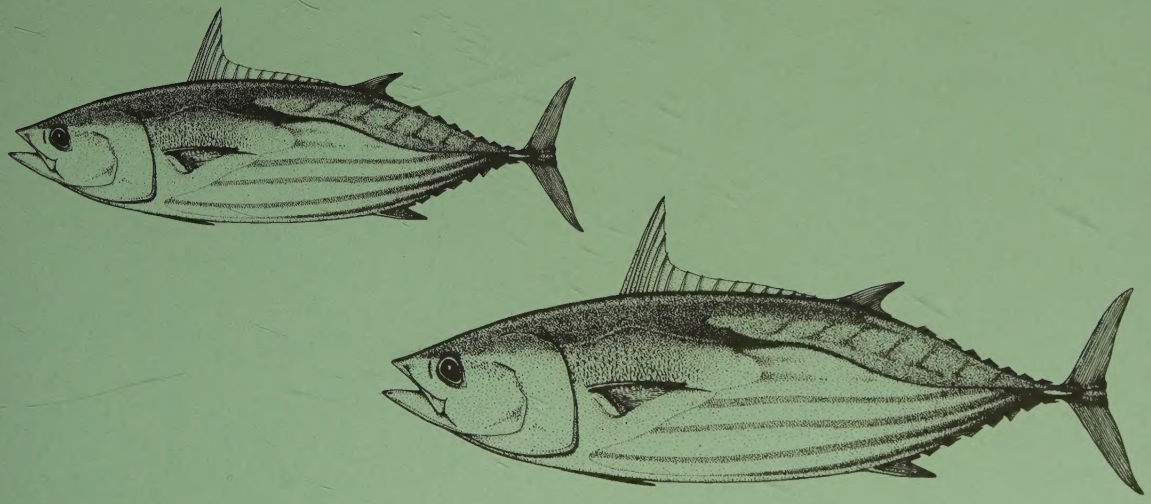
July 1974
No. 7

FISHING INFORMATION

Southwest Fisheries Center-La Jolla, California



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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
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FISHING INFORMATION

JULY 1974, No. 7

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R. Shomura, Director, Honolulu Laboratory

PREFACE

This publication, Fishing Information, appears monthly and contains 1) fishery advisory information, 2) a narrative description of pertinent surface temperature conditions, 3) a narrative description of subsurface temperature structure for parts of the North Pacific, 4) charts of winds and pressures for the eastern North Pacific, 5) charts of sea surface temperature for the North Pacific and eastern tropical Pacific, and 6) charts of subsurface temperature structure in the eastern North Pacific.

A supplement to Fishing Information appears at 15-day intervals throughout the year. This is a chart of sea surface temperature (contoured at 2°F (1°C) intervals) from Baja California to Vancouver Island out to about 135°W. Special bulletins are published in conjunction with the 15-day sea surface temperature charts which include short-term projections of albacore distribution and locations of productive fishing areas, information on oceanographic and atmospheric conditions, and other information as is appropriate during the albacore fishing season.

L. E. Eber, Leader
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Southwest Fisheries Center
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Submitted for publication - August 19, 1974

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L. Eber (Figures 4 and 6)
F. Miller (Figures 8 and 9)
J. Renner (Figures 1, 2, 3, 5, 7, and 15-Day Supplement)
J.F.T. Saur (Figures 10 and 11)

TECHNICAL EDITOR:
K. Raymond

CARTOGRAPHY:
R. Allen

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Pacific Environmental Institute, Fisheries Research Board of Canada, West Vancouver, British Columbia, by L.F. Giovando from observations by S.G. Westhaver at Langara Island Light; D.L. Kupillas at Cape St. James Light; L. Collins at Kains Island Lightstation; O.A. Edwards at Amphitrite Point Light.
Scripps Institution of Oceanography, La Jolla, California
Fishing vessels, Antonina C., Aquarius, Bettie M., Bold Contender, Carol Virginia, Christina C., City of San Diego, Conquest, Denise Marie, Dominator, Eileen M., Elizabeth C.J., Frances Ann, Gina Karen, Independence, Larry Roe, Lucky Strike, Marco Polo, Margaret L., Maria Elena, Marietta, Mermaid, Neptune, Pacific Queen, Polaris, Proud Heritage, Queen Mary, Raefello, Ro-oliva, San Juan, Santa Rosa, Saratoga, Theresa Ann, United States, Willa G.

Expendable bathythermograph and salinity observations are made by the mates and engineers of the S. S. Hawaiian Enterprise of Matson Navigation Co. and S. S. Mariposa of Pacific Far East Line. The data are processed under supervision of D.R. McLain at the NMFS Pacific Environmental Group, Monterey, using computer facilities of the Fleet Numerical Weather Center. The project is partially supported by the National Science Foundation and the Office of Naval Research under Government Order NAonr-9-74.

Sea Surface Temperature and Environmental Conditions

L. EBER AND F. MILLER

Eastern North Pacific

Seasonal warming was greater than normal along most of the North American west coast in July 1974. Negative departures, which had prevailed in waters adjacent to the coast and in the Gulf of Alaska, were reduced in value or replaced by positive departures. Increased warming also brought positive departures to offshore waters west of 130°W, between 20° and 35°N (Figure 5). Temperatures in the region between 35° and 45°N continued to be generally cooler than normal, particularly from 140°-160°W where negative deviations increased to 4°F (2.2°C) in some places. South of the Aleutian Chain warmer conditions prevailed, with positive deviations exceeding 2°F (1.1°C) west of 165°W, between 45° and 50°N.

The sea level atmospheric pressure pattern for July 1974 varied little from the long-term mean, with a centrally located high dominating the eastern North Pacific region. These pressures were associated with persistent, strong anti-cyclonic circulation throughout the month, centered in the vicinity of 160°W, between 35° and 45°N. The resulting southerly winds west of the anti-cyclonic center contributed to the rapid warming west of 160°W, while northerly winds between 140° and 160°W caused intensification of cool surface conditions.

Western North Pacific

A large pool of relatively cold surface water has formed in the central sector of the western North Pacific in July 1974. Negative departures from normal increased from 2°F (1.1°C) in June to 4°F (2.2°C) in July at latitudes 35° to 40°N, between 160° and 175°E (Figure 6). Negative departures generally prevailed over most other portions also, except in the northeast corner, east of 170°E and north of 45°N, and in a few small areas off Japan and the Kuril Islands.

Wind conditions over the area where the cold pool developed, varied in response to changing pressure systems. Northerly winds occurred in the 1st and 4th weeks of July between centers of anti-cyclonic flow west of 160°E and cyclonic flow along 170°E. This may have caused some advective cooling. Also, strong west-to-southwesterly flow in the 2nd week contributed to increased evaporative heat loss at the surface and possibly increased mixing with cooler subsurface water.

Eastern Tropical Pacific

Sea surface temperatures in the Peru Current and its equatorial extension decreased slightly in July 1974 as seasonal cooling in south equatorial waters continued (Figure 8). Negative departures off Ecuador increased to 4°F (2.2°C), while along the equator from 85°-130°W, positive departures of 2°-4°F (1.1°-2.2°C) occurred in several places (Figure 9). West of 130°W, cool surface conditions prevailed from 10°S to 20°N.

Below-normal sea temperatures also persisted out to about 700 miles off most of the Central American coast from Costa Rica to the southern tip of Baja California, except in an area aroung the Revilla Gigedo Islands. Positive departures appeared off Baja California north of 25°N, where temperatures had been below normal in June 1974.

Subsurface Temperature Structure in the Northeast Pacific Ocean

J.F.T. Saur

The latest available subsurface temperature sections between Hawaii and California are presented in Figures 10 and 11. The observations were taken by the SS Hawaiian Enterprise on the San Francisco route during the period of July 5-8, 1974, and on the Los Angeles route, July 12-16, 1974. In Figure 10, surface salinities east of 134°W were taken from the SS Mariposa, which also sailed the San Francisco route in July, and were substituted for salinity data from the SS Hawaiian Enterprise, which appeared incorrect.

Ocean conditions along the sections continue to be recognizably different from those in the past two years. The maximum in surface salinity, about 35.3°/oo, occurs on the San Francisco section (Figure 10) at 144°W (observation 13). This is about 100 nautical miles northeast from its position in July of 1973. On the Los Angeles section (Figure 11), the maximum occurs near 140°W. Surface salinities, as in the previous several months, are around 34.5°/oo, for several hundred miles east of Hawaii.

The most notable difference this year in the eastern part of the section is the absence of two readily identifiable water boundaries marking a transition zone as a separate region between the California Current and the Eastern North Pacific Central. Rather, there appears a gradual rise form the low salinity surface waters of the California Current to the high surface salinity in the Eastern North Pacific Central Water. This change is interrupted only by a slight drop in salinity which appears at station 7 (134.5°W) on the San Francisco route and station 16 (135.5°W) on the Los Angeles route.

On the San Francisco route the complex or irregular vertical structure which is indicative of the Transition Zone is found at observations 2 through 10, i.e., between 127° and 139°W. This is about 300 nautical miles closer to the California Coast than in 1972-73 when the typical transition zone structure was found between 134° and 139°W. Thus, water temperatures at depths of 80-150 m are about 2°C (3.6°F) warmer -- and probably higher in salinity -- between 128° and 133°W than last year. Also, throughout most of the section the average temperature of the upper 100 m is about 1°C (1.8°F) higher than in 1973 except in a 100-150 nautical mile wide zone along the California Coast. Upwelling has kept temperatures in this zone as much as 1°C cooler than last year.

Surface mixed layers about 40-50 m deep occurred along most of the San Francisco section. On the Los Angeles section, they were about 40 m deep west of 140°W but less deep to non-existent in the eastern half of the section.

The 16°-19°C (60°-66°F) temperature zone is shaded in the vertical sections so that its seasonal movements can be followed in relation to albacore catches. On the San Francisco route the surface intersection of this zone moved eastward about 5° in longitude in the 6 weeks since the first of June. In this area (between 128° and 133°W) the zone was less than 80 m in depth. On the Los Angeles route the 16°-19°C zone was generally less than 60 m deep near the region where it intersected the surface. The top of the zone (the 19°C isotherm) descended to more than 50 m west of 140°W on the San Francisco route and 136°W on the Los Angeles route.

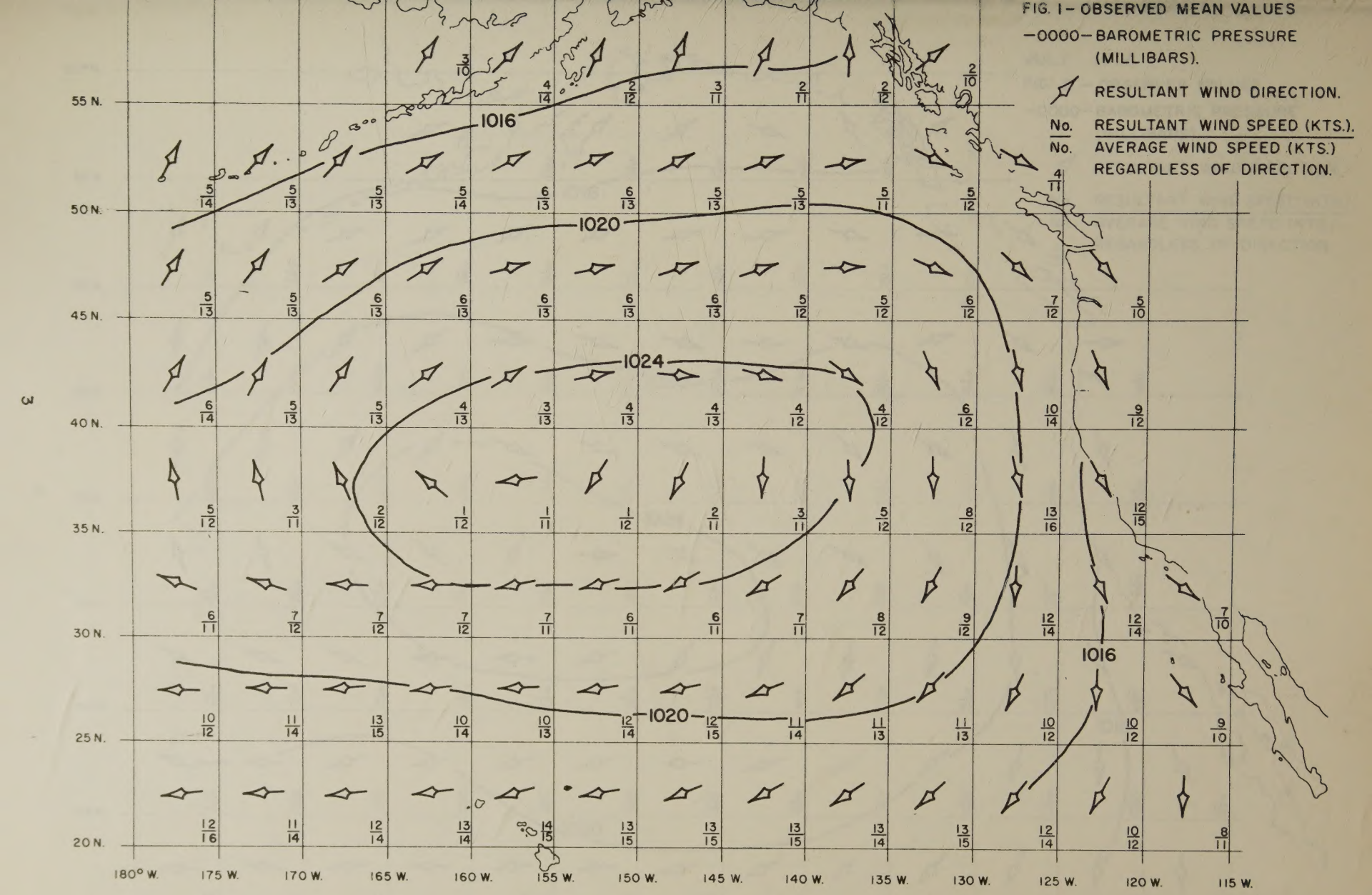
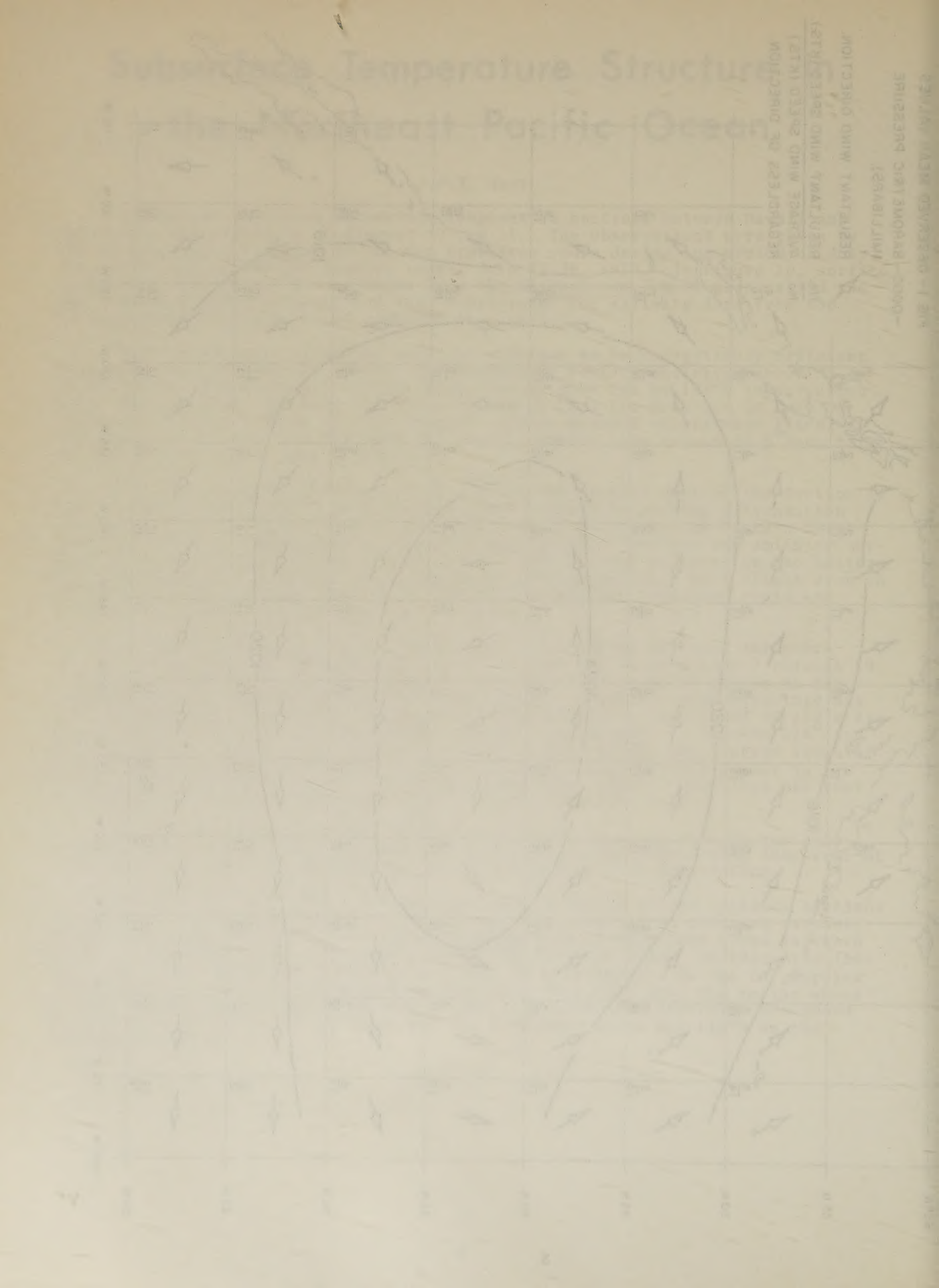
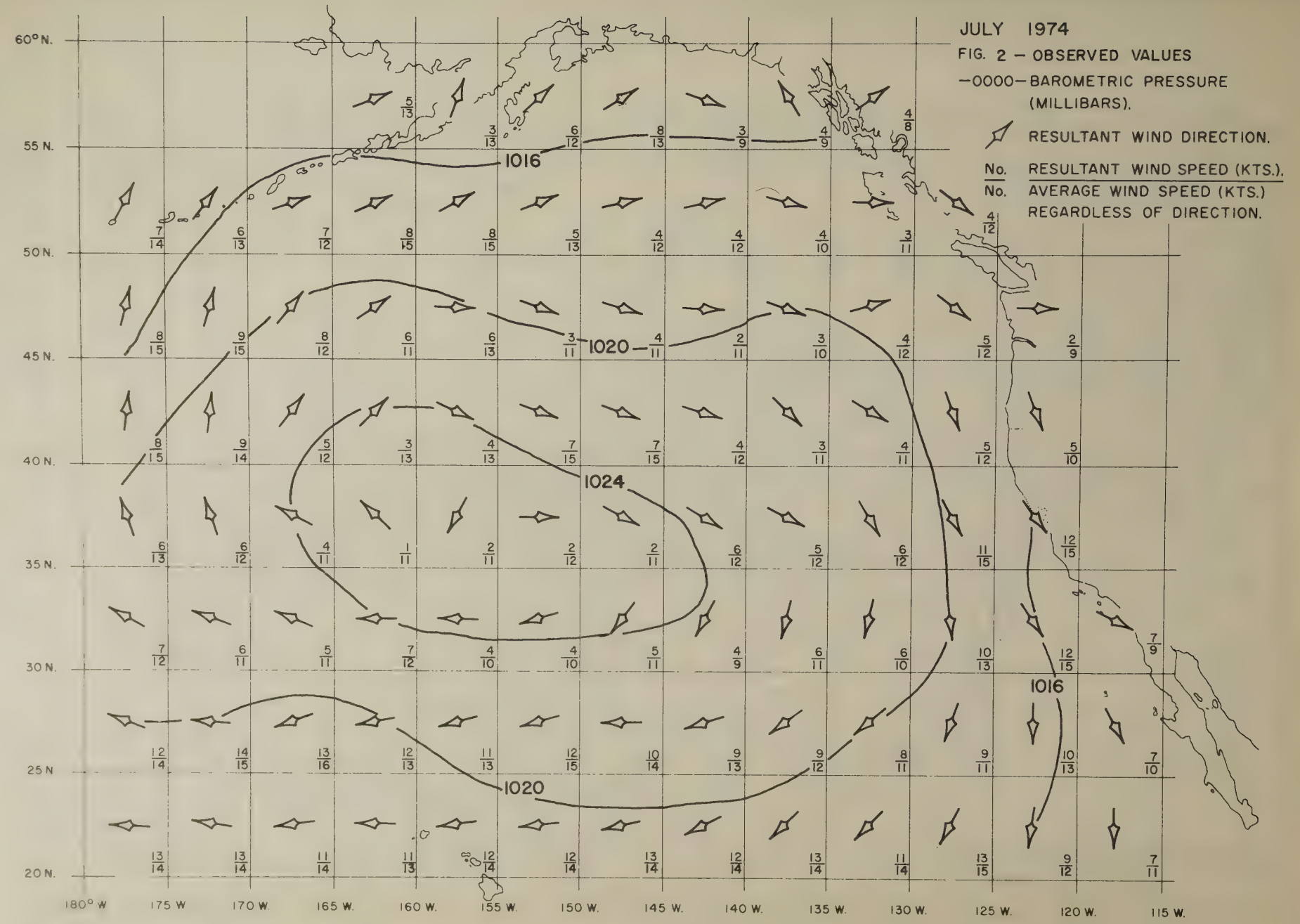
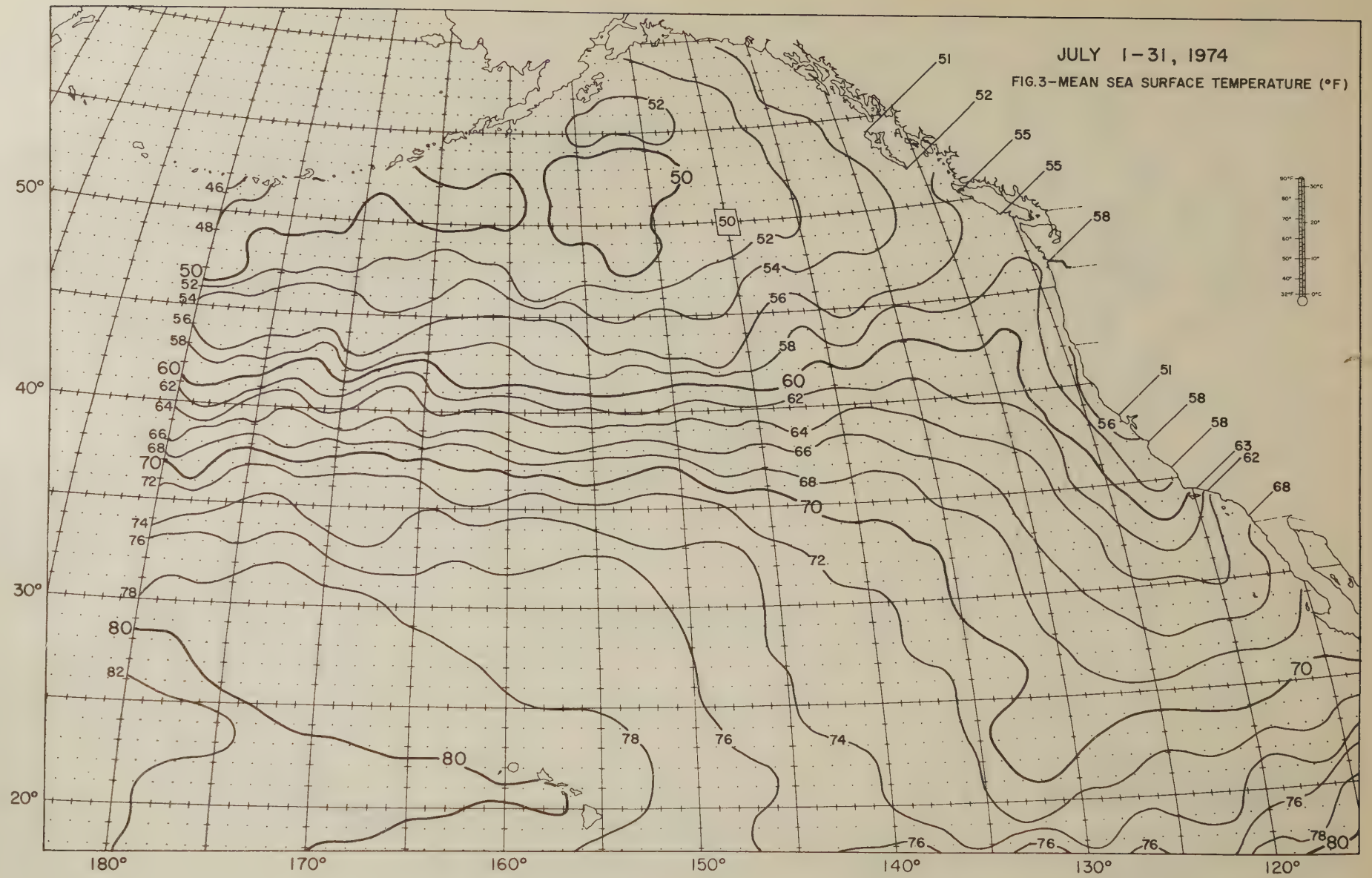
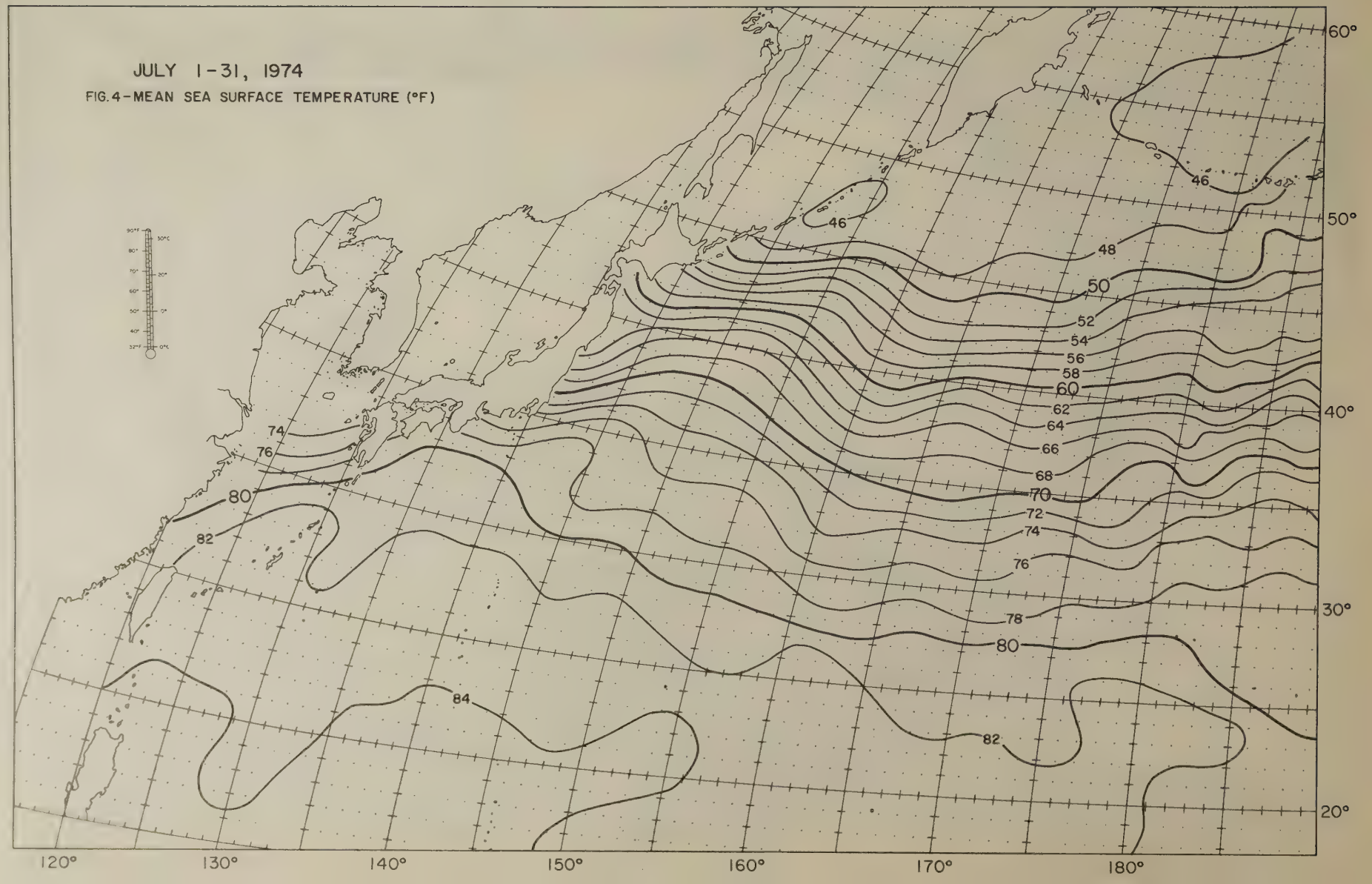


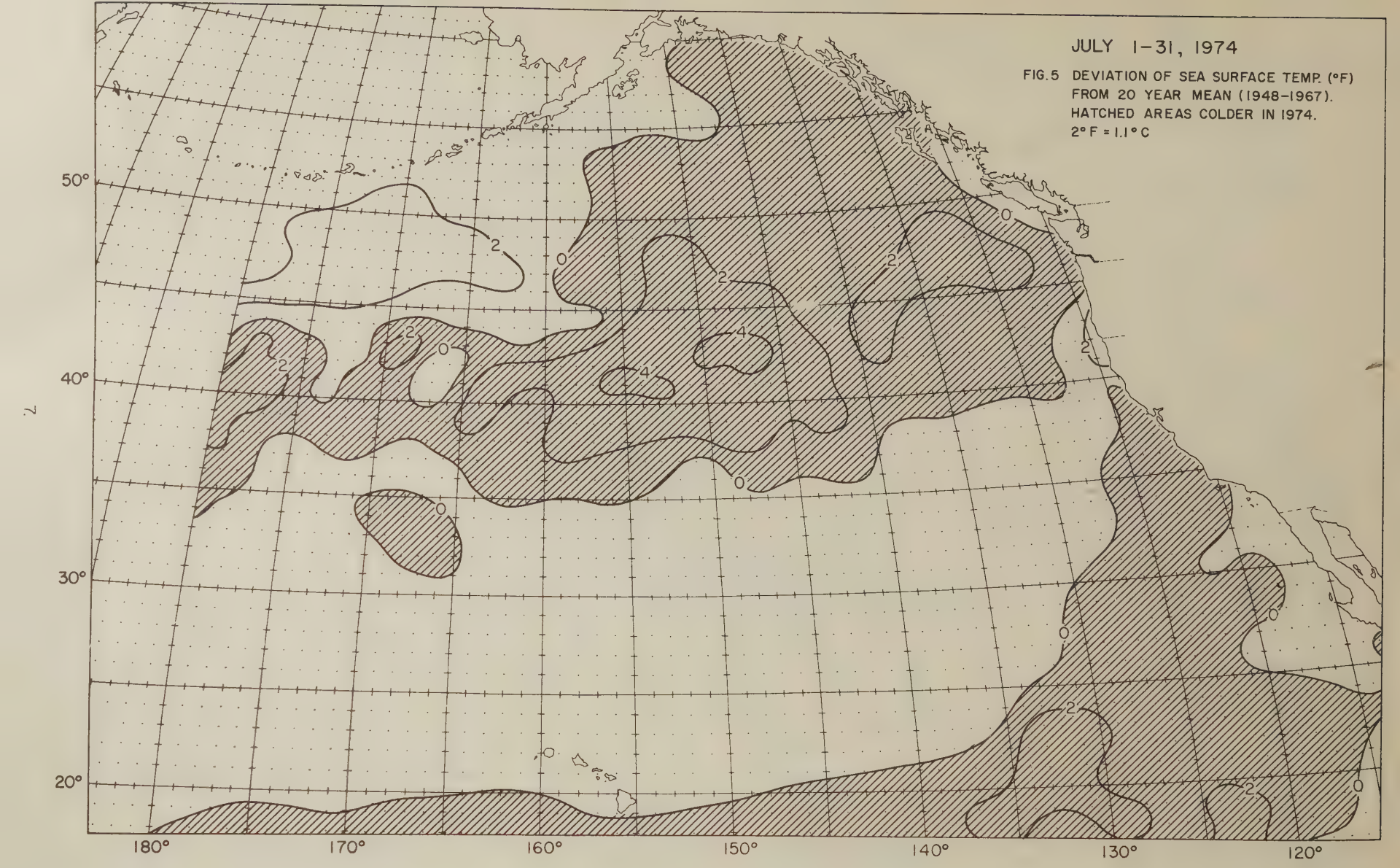
FIG. 1 – OBSERVED MEAN VALUES
—0000— BAROMETRIC PRESSURE (MILLIBARS).
RESULTANT WIND DIRECTION.
No. RESULTANT WIND SPEED (KTS.).
No. AVERAGE WIND SPEED (KTS.) REGARDLESS OF DIRECTION.
1016
1020
1024
1016
1020
55 N.
50 N.
45 N.
40 N.
35 N.
30 N.
25 N.
20 N.
180° W.
175 W.
170 W.
165 W.
160 W.
155 W.
150 W.
145 W.
140 W.
135 W.
130 W.
125 W.
120 W.
115 W.

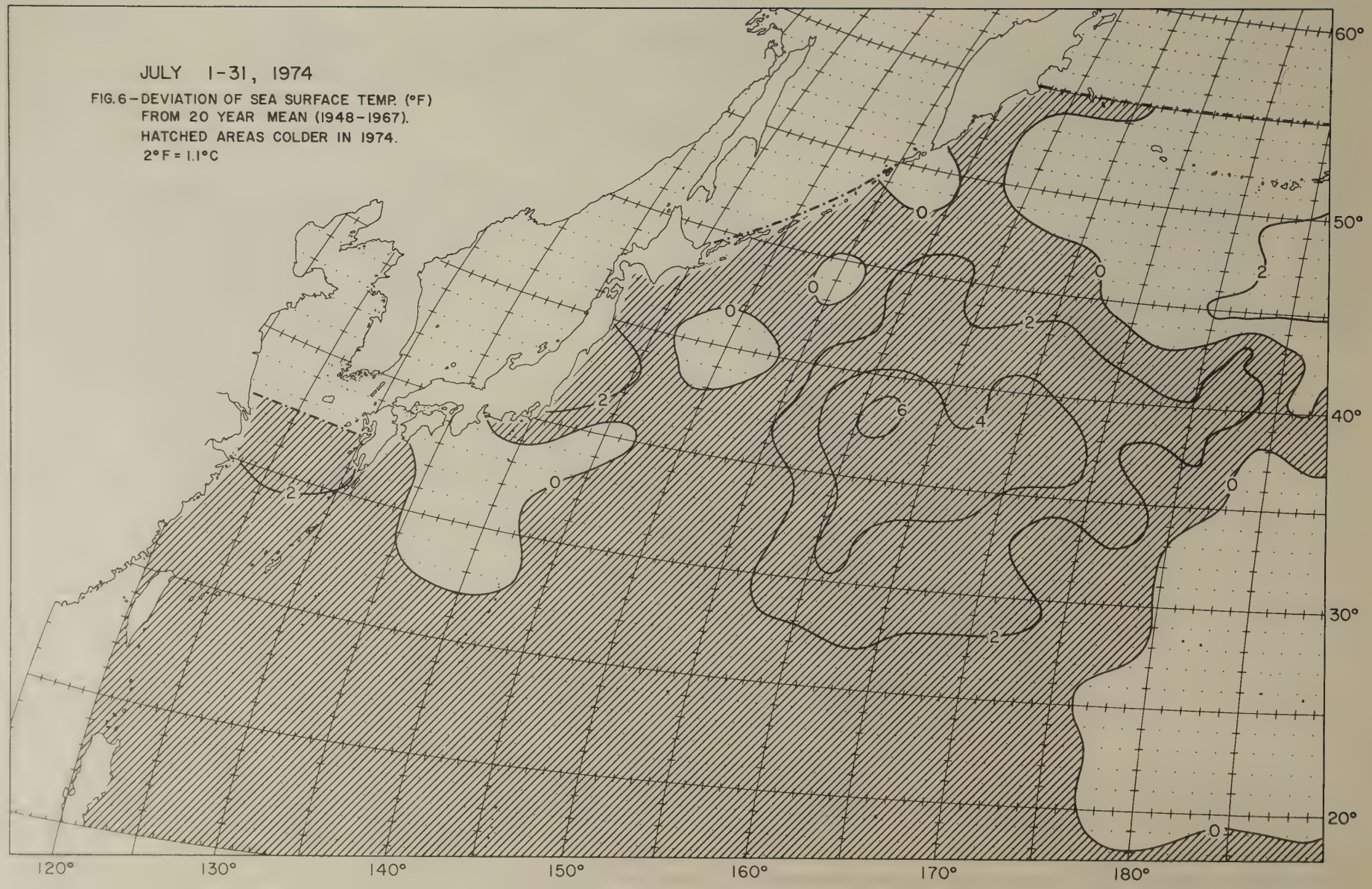



JULY 1974
FIG. 2 – OBSERVED VALUES
–0000– BAROMETRIC PRESSURE (MILLIBARS).
RESULTANT WIND DIRECTION.
No. RESULTANT WIND SPEED (KTS.).
No. AVERAGE WIND SPEED (KTS.) REGARDLESS OF DIRECTION.
1016
1020
1024
1016
1020
60° N.
55 N.
50 N.
45 N.
40 N.
35 N.
30 N.
25 N
20 N.
180° W
175 W
170 W.
165 W.
160 W.
155 W.
150 W.
145 W.
140 W.
135 W.
130 W.
125 W.
120 W.
115 W.


JULY 1-31, 1974
FIG.3-MEAN SEA SURFACE TEMPERATURE (°F)
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


JULY 1-31, 1974
FIG. 4-MEAN SEA SURFACE TEMPERATURE (°F)
46
48
50
52
54
56
58
60
62
64
66
68
70
72
74
76
78
80
82
84
60°
50°
40°
30°
20°
120°
130°
140°
150°
160°
170°
180°


JULY 1-31, 1974
FIG. 5 DEVIATION OF SEA SURFACE TEMP. (°F) FROM 20 YEAR MEAN (1948-1967). HATCHED AREAS COLDER IN 1974. 2° F = 1.1° C
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°
2
0
2
2
2
4
4
2
0
0
0
0
0
2
0
2
0


JULY 1-31, 1974
FIG. 6 – DEVIATION OF SEA SURFACE TEMP. (°F)
FROM 20 YEAR MEAN (1948–1967).
HATCHED AREAS COLDER IN 1974.
2°F = 1.1°C
60°
50°
40°
30°
20°
120°
130°
140°
150°
160°
170°
180°
0
2
4
6

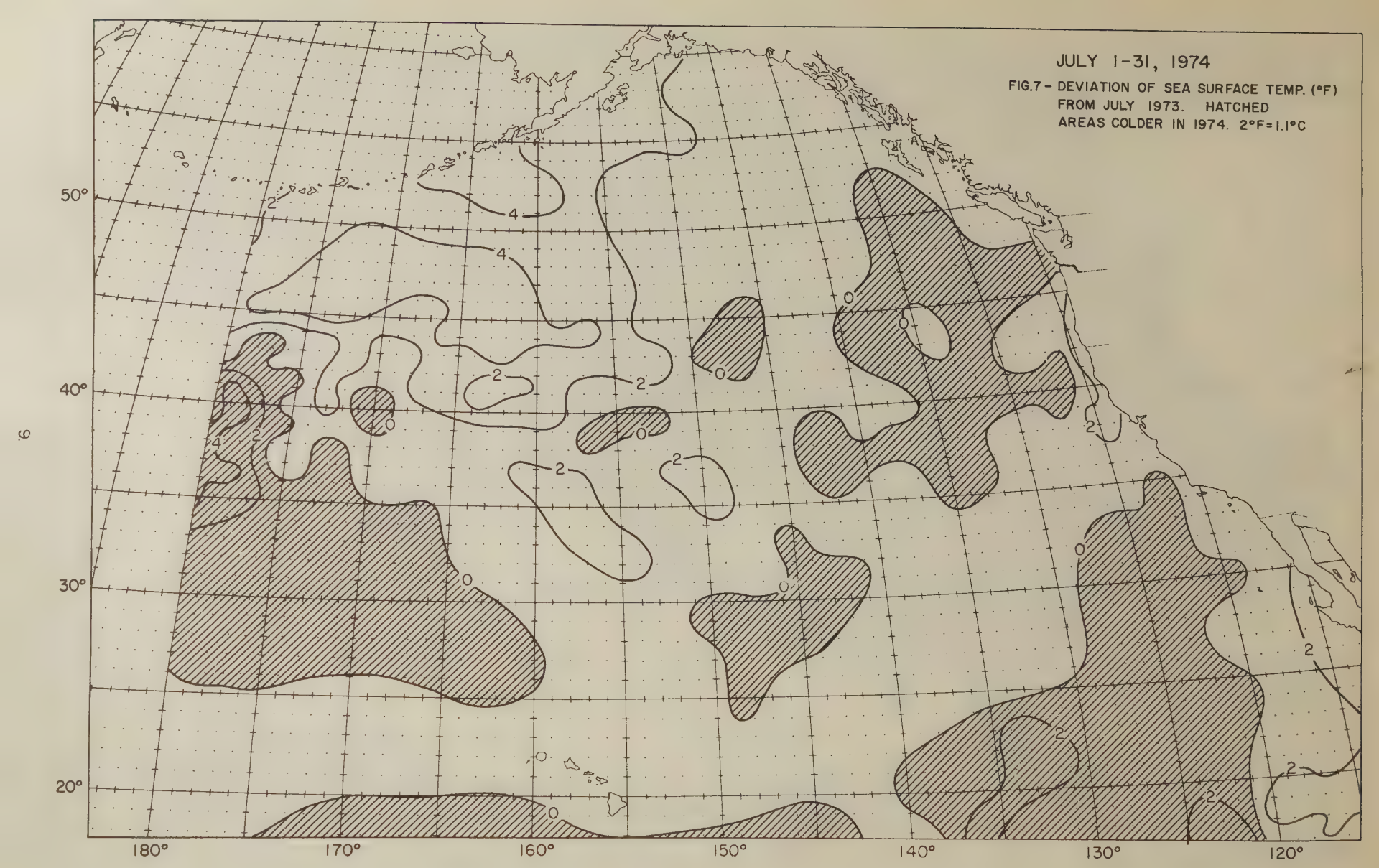

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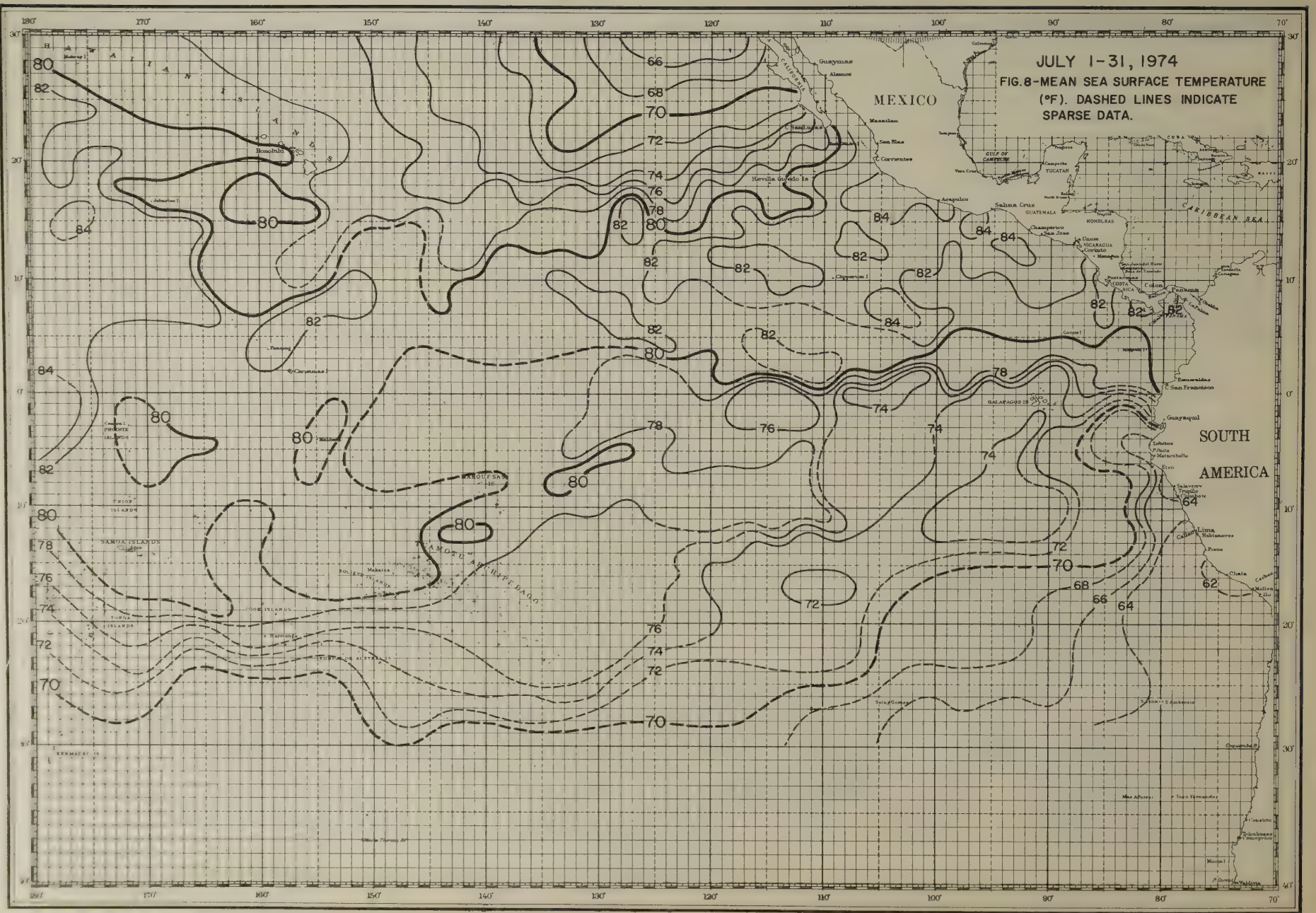
FIG.7 - DEVIATION OF SEA SURFACE TEMP. (°F) FROM JULY 1973. HATCHED AREAS COLDER IN 1974. 2°F=1.1°C
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


JULY 1-31, 1974
FIG. 8-MEAN SEA SURFACE TEMPERATURE (°F). DASHED LINES INDICATE SPARSE DATA.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CALIFORNIA
GULF OF CAMPECHE
YUCATAN
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
PANAMA
CUBA
Guaymas
Mazatlan
San Blas
Corrientes
Acapulco
Salina Cruz
Champerico
San Jose
Managua
Colon
Panama
Esmeraldas
San Francisco
Guayaquil
Lobitos
Talara
Salaverry
Trujillo
Chimbote
Lima
Callao
Pisco
Chala
Mollendo
Arica
Iquique
Honolulu
Kingman Reef
Palmyra
Christmas
Fanning
Canton I.
Enderbury I.
Hull I.
Gardner I.
Nassau I.
Suwarrow I.
Penrhyn I.
Manihiki
Rakahanga
Pukapuka
Nassau
Samoa Islands
Cook Islands
Tuamotu Archipelago
Tubuai Islands
Kermadec Is.
Galapagos Is.
Cocos I.
Malpelo I.
Gorgona I.
Gorgona
Malpelo
Juan Fernandez
Mas Afuera
Mas Afuera
Concepcion
Talcahuano
Valparaiso
Coquimbo
Salas y Gomez
Easter I.
San Ambrosio
Revilla Gigedo Is.
Clipperton I.
Socorro I.
Roca Partida
Johnston I.
Wake I.
Midway Is.
Makatea
Fakarava
Hao
Tikehau
Rangiroa
Tuamotu Archipelago
Tubuai Islands
Marquesas Is.
Nuku Hiva
Hiva Oa
Fatu Hiva
Tahuata
Ua Huka
Ua Pou
Nuku Hiva
Hiva Oa
Fatu Hiva
Tahuata
Ua Huka
Ua Pou
Marquesas Is.
Tuamotu Archipelago
Tubuai Islands
Rapa
Pitcairn I.
Henderson I.
Ducie I.
Oeno I.
Easter I.
Salas y Gomez
San Ambrosio
San Felix
Juan Fernandez
Mas Afuera
Mas Afuera
Juan Fernandez
Concepcion
Talcahuano
Valparaiso
Coquimbo
Cocos I.
Malpelo I.
Gorgona I.
Gorgona
Malpelo
Galapagos Is.
Esmeraldas
San Francisco
Guayaquil
Lobitos
Talara
Salaverry
Trujillo
Chimbote
Lima
Callao
Pisco
Chala
Mollendo
Arica
Iquique
Panama
Colon
Costa Rica
Nicaragua
Honduras
Guatemala
Salina Cruz
Acapulco
Champerico
San Jose
Managua
Corrientes
San Blas
Mazatlan
Guaymas
Alamos
Revilla Gigedo Is.
Clipperton I.
Socorro I.
Roca Partida
Johnston I.
Wake I.
Midway Is.
Kingman Reef
Palmyra
Christmas
Fanning
Canton I.
Enderbury I.
Hull I.
Gardner I.
Nassau I.
Suwarrow I.
Penrhyn I.
Manihiki
Rakahanga
Pukapuka
Nassau
Samoa Islands
Cook Islands
Tuamotu Archipelago
Tubuai Islands
Marquesas Is.
Nuku Hiva
Hiva Oa
Fatu Hiva
Tahuata
Ua Huka
Ua Pou

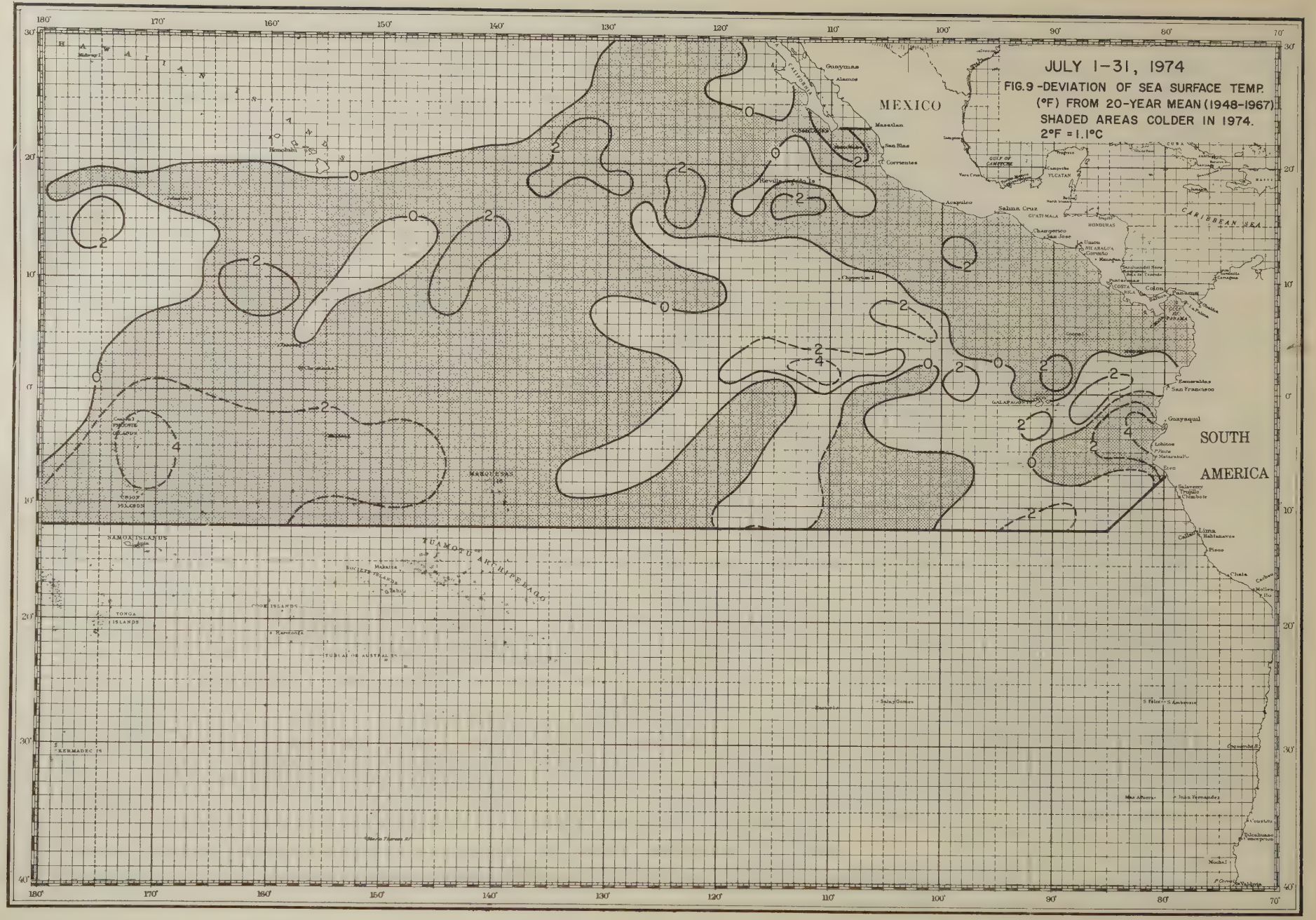
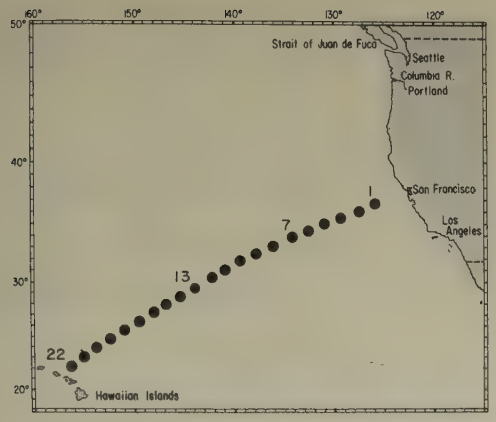
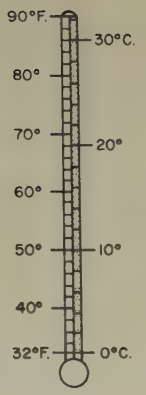

JULY 1–31, 1974
FIG. 9 -DEVIATION OF SEA SURFACE TEMP. (°F) FROM 20-YEAR MEAN (1948-1967). SHADED AREAS COLDER IN 1974.
2°F = 1.1°C
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
HAWAIIAN ISLANDS
MARQUESAS
SAMOA ISLANDS
TUAMOTU ARCHIPELAGO
COOK ISLANDS
TONGA ISLANDS
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Acapulco
Salina Cruz
Chiapam I
Guayaquil
Lima
Callao
Pisco
Chala
Salaverry
Trujillo
Chimbote
Paita
Talara
Tumbes
Zorritos
Esmeraldas
San Francisco
Colon
Panama
Puerto Limon
Puerto Cortes
Belize
Campeche
Progreso
YUCATAN
GULF OF CAMPECHE
Veracruz
Tampico
Manzanillo
Salina Cruz
Chiapam I
Honolulu
Midway I
Johnston I
Palmyra I
Christmas I
Fanning I
Canton I
Phoenix Islands
Gilbert Islands
Makatea
Tahiti
Raroia
Rapa
Easter I
Salas y Gomez
Juan Fernandez
Mas Afuera
Mocha I
Coquimbo
Valparaiso
Concepcion
Talcahuano
Corral
Chiloe I
Puerto Montt
Tubuai
Rurutu
Rimatara
Rurutu
Raivavae
Tubuai
Rapa
Pitcairn I
Henderson I
Ducie I
Oeno I
Marcus I
Macquarie I
Auckland Is
Campbell I
Antipodes Is
Bounty Is
Chatham Is
Kermadec Is
Norfolk I
Lord Howe I
New Caledonia
Loyalty Is
New Hebrides
Fiji Is
Wallis I
Futuna I
Rotuma I
Samoa Is
Tokelau Is
Phoenix Is
Line Is
Tuamotu Archipelago
Society Is
Austral Is
Cook Is
Niue I
Tonga Is
Kermadec Is
Norfolk I
Lord Howe I
New Caledonia
Loyalty Is
New Hebrides
Fiji Is
Wallis I
Futuna I
Rotuma I
Samoa Is
Tokelau Is
Phoenix Is
Line Is
Tuamotu Archipelago
Society Is
Austral Is
Cook Is
Niue I
Tonga Is
180°
170°
160°
150°
140°
130°
120°
110°
100°
90°
80°
70°
30°
20°
10°
0°
10°
20°
30°
40°

FIGURE 10





HONOLULU – SAN FRANCISCO

JULY 5-8, 1974

SS HAWAIIAN ENTERPRISE

VOYAGE 94

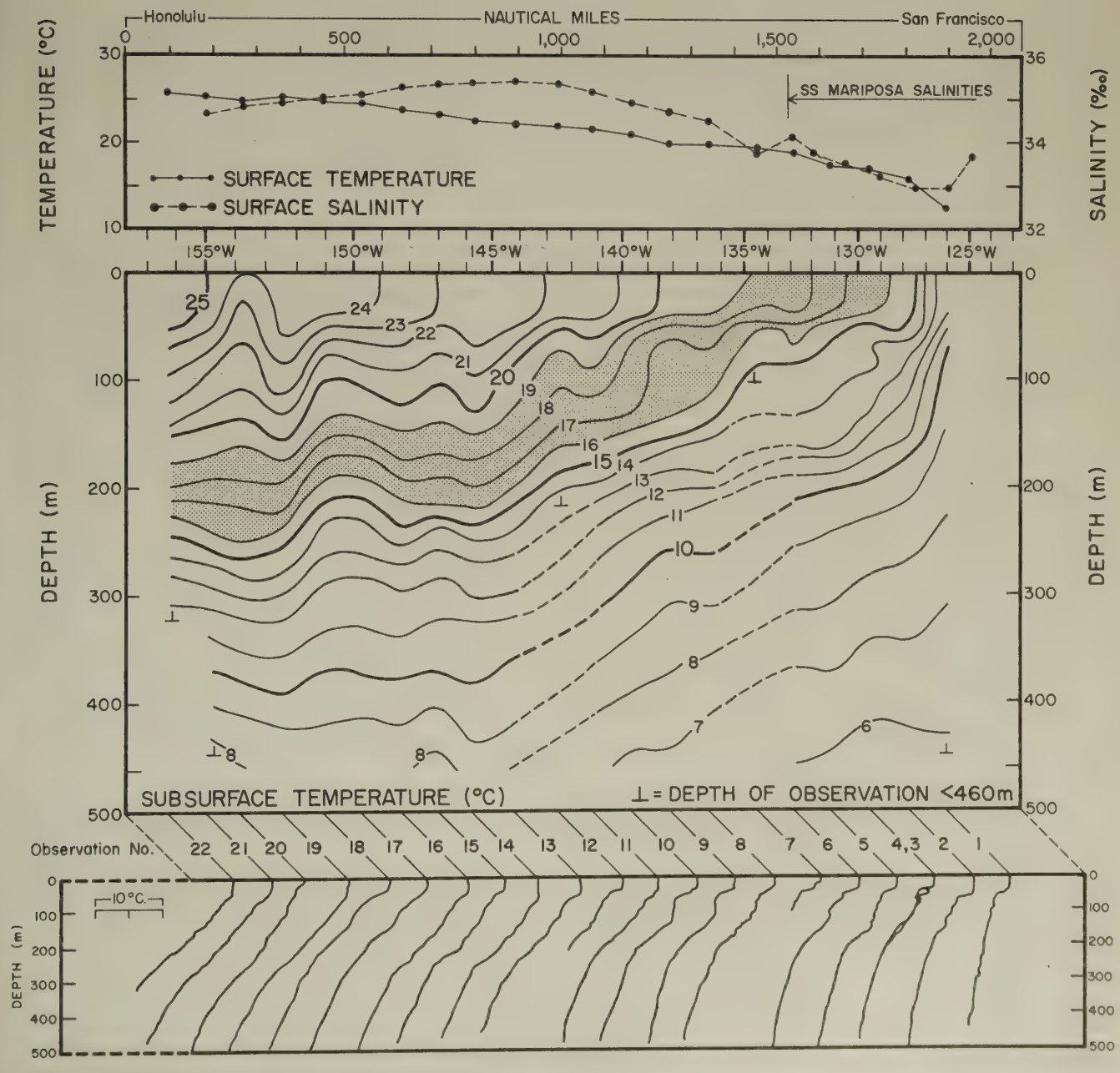
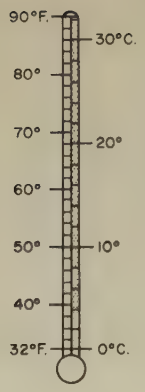


FIGURE 1



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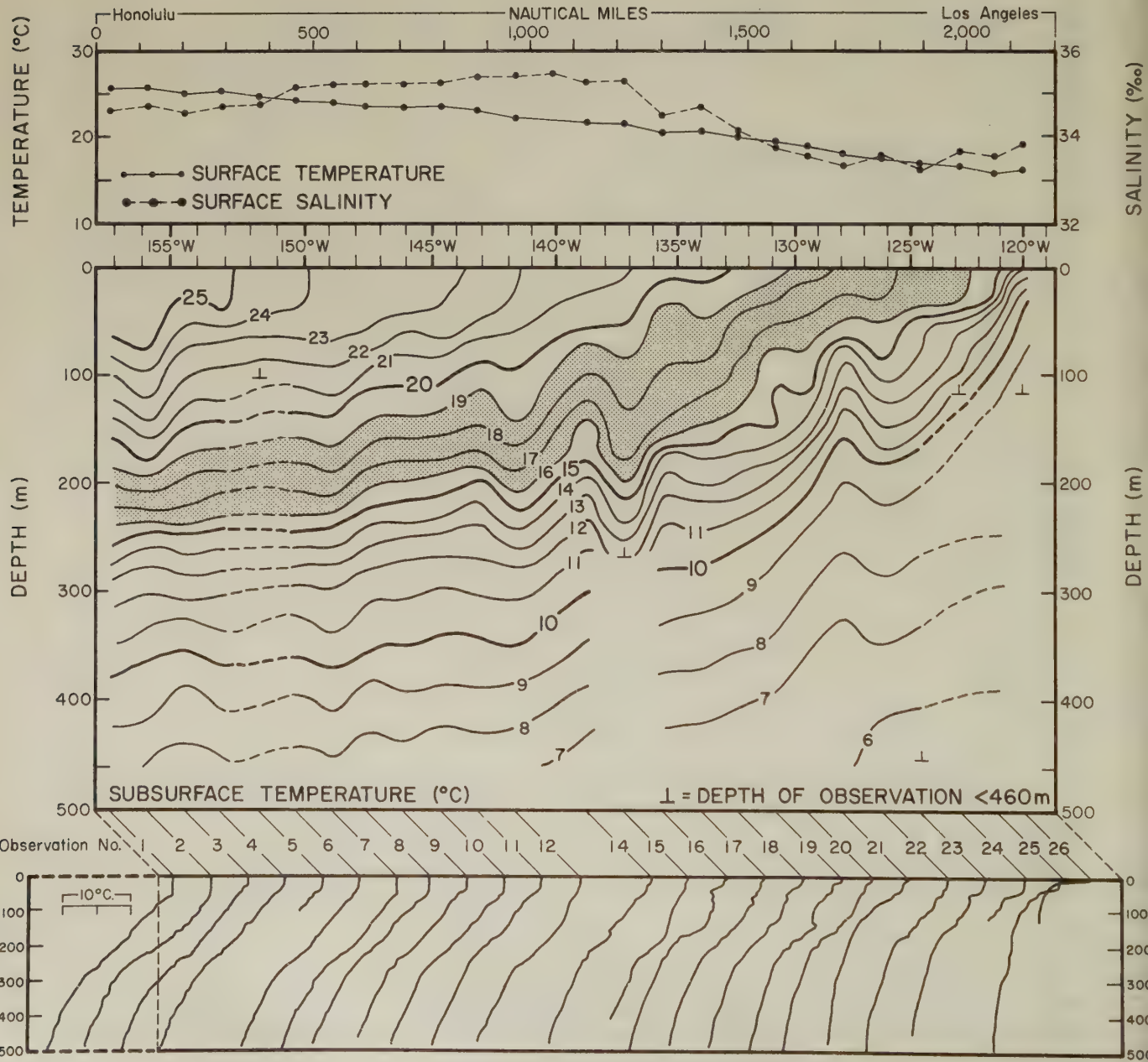
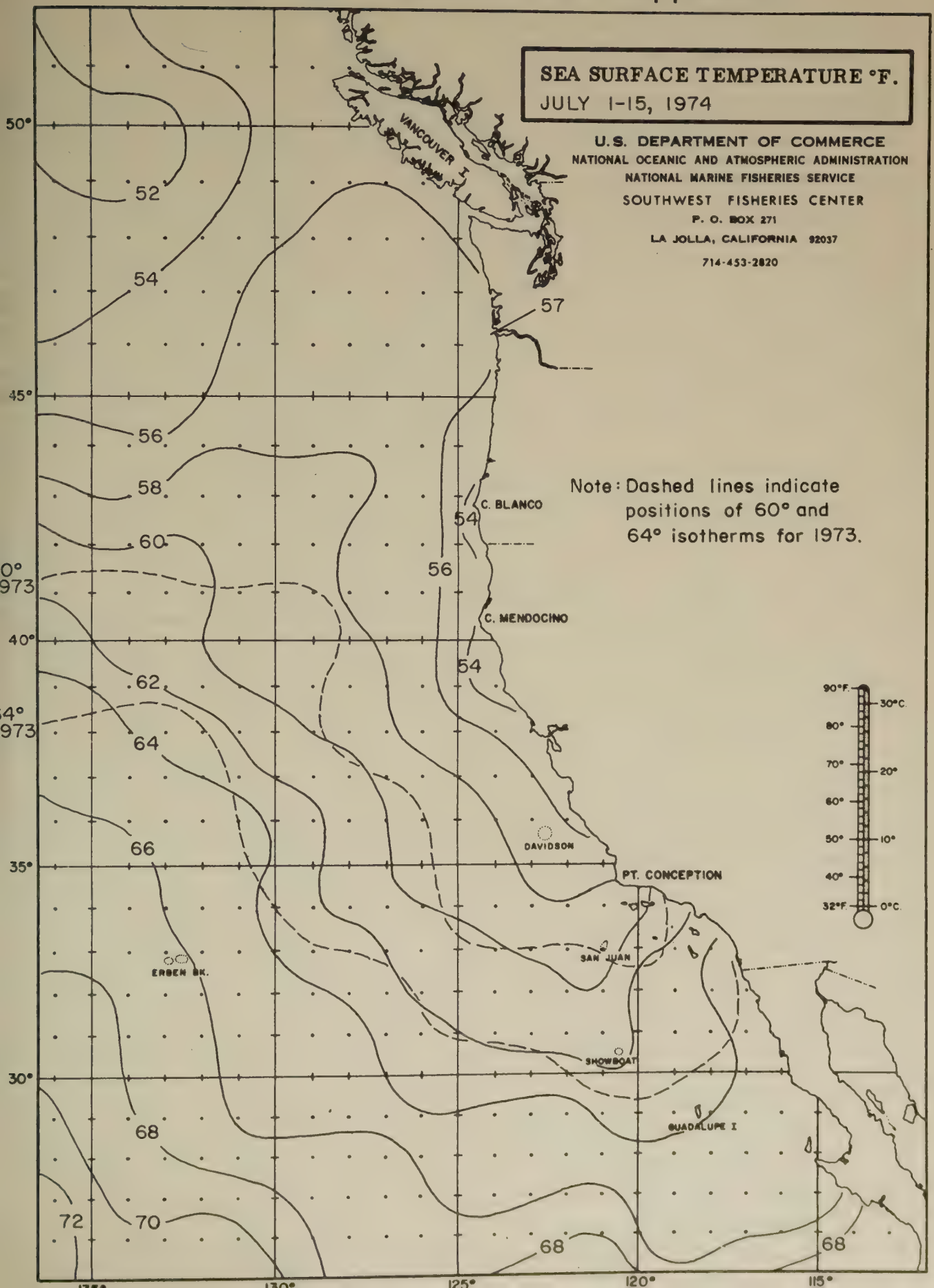


FISHING INFORMATION – supplement



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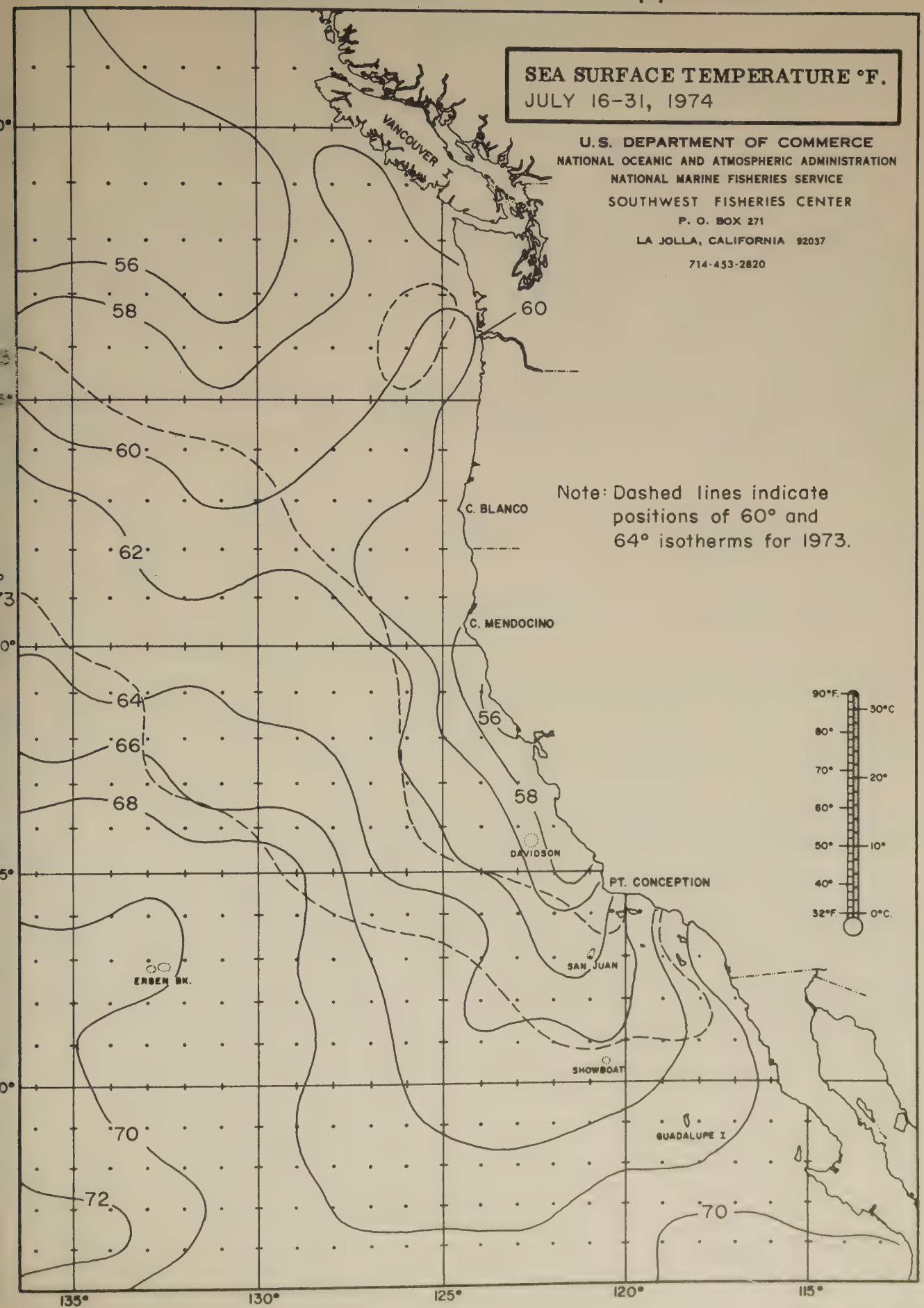

UNITED STATES DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
La Jolla, California 92037

BULLETIN NO. 74-3

ALBACORE CHARTER BOATS COMPLETE RESEARCH WORK--
FIRST ALBACORE CATCHES MADE IN SOUTHERN CALIFORNIA WATERS

Two areas offshore central California produced good commercial catches from June 18-30. The ocations were approximately 35-36°N, 130°30'-132°30'W (about 500-600 miles west of Morro Bay) and 33-34°N, 124-127°W (approximately 150-350 miles west-southwest of Point Conception). In both areas, the American Fishermen's Research Foundation's chartered jigboats and other commercial jigboats averaged from 25-200 fish/day/boat. Water temperatures were generally between 60-62°F (15.6-16.7°C), and most of the fish taken weighed about 11-12 pounds. However, more of the smaller 6-pound albacore were found in the region west-southwest of Point Conception. The top score was over 1000 fish on June 27 near 35°00'N, 130°45'W, but high catches were mostly between 200-400 fish per day. In both areas, fishing tended to be spotty.

The two groups of chartered jigboats worked in the areas of good fishing until June 26 in order to tag as many albacore as possible. On June 27 they moved away from these areas and scouted nearshore areas off southern California. One group of three boats worked southeastward to "Showboat" and then northeastward to San Diego, with water temperatures of about 61°F (16.1°C), and catches of 0-17 fish/boat. The second group of two boats moved directly from the area 250-300 miles off Point Conception to San Diego and reported small catches. Both groups returned to San Diego on June 30.

As of June 28, the chartered boats had caught 9334 fish and tagged 1379.

Other areas along the California coast produced small catches in late June. A few fish were taken about 220 miles west of San Francisco on June 18, near San Juan Seamount on June 23, and 20 miles west of Davidson Seamount on June 24. A few fish were also caught off Eureka near 41°N, 125°W during late June.

The first report of albacore catches in southern California waters was on June 28 near "Sixty-Mile Bank" and the "Dumping Grounds." Sportboats also worked this area during the weekend of June 29 and took 20 albacore on Saturday and 334 on Sunday.

From June 18-23, the R/V David Starr Jordan conducted oceanographic studies in the area 500-600 miles west of Morro Bay where good albacore catches were made by the commercial boats. On June 24 the Jordan worked northward along 132°W to 41°N but did not catch any albacore north of 39°N. The Jordan also returned to San Diego on July 1.

Daily broadcasts of albacore fishing information prepared by the NMFS La Jolla Laboratory will begin on July 8. A schedule of stations, broadcast times and frequencies is given in the May 1974 issue of Fishing Information.

Seasonal warming occurred in most regions offshore western North America during the last 2 weeks in June, except in near-shore regions off Washington and Oregon and offshore southern California where sea surface temperatures cooled 1-2°F (0.6-1.1°C) from those during the first half of the month.

In spite of this warming, temperatures are still below normal along most of the coast, particularly off Oregon and southern California where surface temperatures are about 2°F (1.1°C) below normal. In addition, the 60°F (15.6°C) isotherm is 1-3 degrees south of its 1973 position between 123°W and 133°W.

According to the Long Range Prediction Group of the National Weather Service, continued above-normal temperatures over interior regions of the western U.S. are expected throughout July. These conditions, coupled with high sea level pressures offshore, should cause frequent periods of strong north-northwesterly winds and rough seas off the California coast throughout the month.

Staff, Albacore Fishery Investigations
R. Michael Laurs, Leader

July 1, 1974

UNITED STATES DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
La Jolla, California 92037

BULLETIN No. 74-4

ALBACORE FISHING SCATTERED ALONG MUCH OF THE U.S. WEST COAST

Fishing was scattered during the first 2 weeks of July as catches were made from the 213 thom spot off San Diego to Cape Flattery. The best fishing areas during this period were 500-600 es west of Morro Bay from July 1-5 and 25-120 miles off the coast from Point Arena to Cape Mendino between July 6-12. Most of the catches made in these areas were on 11-13 pound albacore, though some 18-pound fish were also taken. Average scores were from 20-200 fish/jigboat/day, h high catches of about 400 fish. Surface water temperatures were mainly 62°F (16.7°C) in the rro Bay fishing area and 56-58°F (13.3-14.4°C) off Fort Bragg.

Boats began to leave the area off Fort Bragg on July 13 because of poor fishing, but one at caught 180 fish again on July 14 in the Gorda Seavalley. Those boats that left northern Calornia waters were heading north. The Jackson Seamount area off Cape Blanco also produced some sh scores from July 7-9. A catch of 168 fish was reported on July 7 on fish weighing 12-20 pound d another score of 98 fish was made on July 9 from this area. However, strong winds on July 8 d 9 and better fishing off Point Arena during this period caused many boats to leave the southern egon area.

Albacore were also caught in small numbers off Cape Flattery and the Columbia River on ly 11, and a fair score of 140 fish was reported near the "Dumping Grounds" west of the Columbia ver on July 13. The first catch off the Columbia River, however, was made by a jigboat charter- by the Fish Commission of Oregon. This boat left Astoria on July 1 and returned on July 9 and ported catches off Coos Bay and Cape Blanco in about 59°F (15.0°C) waters.

San Diego sportboats fished mostly near the "60-Mile Bank" southwest of San Diego, but shing was generally slow until July 12-14. During this period, scores climbed to better than 0 fish a day per boat. Sportboats also fished near the southeastern tip of San Clemente Island, t only small catches were made.

The 1974 offshore albacore scouting, tagging and research program conducted by the tional Marine Fisheries Service and the American Fishermen's Research Foundation ended with the turn of five chartered albacore jigboats and the R/V David Starr Jordan on June 30 and July 1. eanographic observations made by the Jordan indicated that the frontal regions which define undaries between north and central Pacific waters, and which have been found to be important in e migration pattern of albacore, were poorly developed west of 135°W longitude. More mixing of ter masses was encountered and many smaller fronts were found this year than in 1972 and 1973. parently, the albacore were reacting to these conditions, and catches were scattered and inconstent until two areas near 35°30'N, 132°W and 34°N, 126°W developed. The 1974 cruise added considerable information to studies on albacore migration and the association of albacore to frontal atures. Also, 1693 albacore were tagged and released. In addition, the cooperation between the rdan and the chartered vessels and independent vessels was quite effective and mutually beneficia

Three jigboats on charter to the AFRF departed San Diego on July 16 to begin the first rt, mainly off southern and Baja California, of the three month inshore scouting and tagging uises. NMFS technicians are on board two of the vessels to aid the fishermen in tagging albacore d making oceanographic observations.

Surface waters offshore western North America warmed at near-normal rates during the rst half of July. Most offshore areas warmed by about 2°F (1.1°C), except for a region between nterey and Morro Bay where temperatures dropped slightly from values during the last half of June

Consequently, sea surface temperatures are still 1-2°F (0.6-1.1°C) below normal along st of the coast, although slightly above-normal conditions exist off Washington, near the coast tween Cape Blanco and Point Arena and a small area southwest of the Channel Islands.

According to the Long Range Prediction Group of the National Weather Service, atmospheric essures are expected to be below normal offshore the Pacific Northwest from mid-July to midgust, resulting in a succession of frontal passages over coastal regions. During these periods, rth-northwesterly winds along the Oregon and northern California coasts should decrease and low favorable fishing conditions. Between these frontal passages, high pressures offshore and ating over interior regions of the western U.S. should cause periods of strong north-northwesterl nds along southern Oregon and California.

Daily broadcasts of albacore fishing information prepared by NOAA's National Marine sheries Service are being transmitted over marine radiobands during the albacore season. The oadcasts are being made on weekdays and Saturday mornings by the following radio stations:

WWD (La Jolla, California) on SSB carrier frequencies 4409.4, 8789.6, and 12424.5 kHz at 0615 and 1745 PDT on weekdays and 0815 on Saturdays.
KFX (Astoria Marine Operator) on 2598 kHz at 0630 and 1945 PDT.
KNPT (Newport, Oregon) on commercial AM 1310 kHz at 0615 and 1915 PDT.
NMC (Point Reyes Coast Guard) on AM compatible frequency 2670 and on SSB carrier frequencies 4383.8, 8732.1, 13147.5 kHz at 0645 and 1945 PDT.
KRED (Eureka, California) on commercial AM 1480 kHz at 0605 and 2005 PDT.

o determine the upper sideband assigned frequencies for tunable receivers add 1.4 kHz to WWD d NMC carrier frequencies).

Staff, Albacore Fishery Investigations
R. Michael Laurs, Leader

ly 16, 1974

UNITED STATES DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
La Jolla, California 92037

BULLETIN No. 74-5

ALBACORE FLEET CENTERED OFF WASHINGTON

Much of the albacore fleet is fishing between the Columbia River and Vancouver Island ter a rapid migration from the northern California-southern Oregon area. Good catches were le from Astoria northward during the last 10 days of July, but scattered good catches were also ported from Point Arena to the Columbia River throughout the last 2 weeks of July.

Fair to good scores were recorded between Fort Bragg and Cape Blanco during July 15-22 d again during July 27-31 off northern California. Average catches were 75-200 fish/day/boat th highs of 100-500 fish and were taken from within 40 miles of Fort Bragg, Eureka and Crescen ty. Boats near Jackson Seamount and inshore had scores of 80-600 fish from 60-61°F (15.6- .1°C) sea surface temperature waters. Albacore off northern California averaged about 10-11 unds and those caught off southern Oregon averaged 12-13 pounds. Rough seas off northern lifornia appeared to have prevented continued good scores in this area through the last weeks July.

The majority of the jigboats began moving northward from the northern California-south- n Oregon area about July 19th when good catches began to show between Coos Bay and Newport. On ly 22 one boat caught more than 200 fish off Cape Scott, Vancouver Island and catches began to prove near the "Dumping Grounds" off the Columbia River. As more boats moved northward, attered good catches were made off Coos Bay, Florence and Newport and have continued through ly when weather permitted.

Jigboats that worked from Astoria to Vancouver Island in the last 10 days of July had me catches of over 500 fish and averages of 50-200 fish/boat/day from 60 miles west of the lumbia River and Westport and off Cape Flattery. Most of these fish are being caught in -62°F (15.6-16.7°C) sea surface temperature waters and are averaging 12-14 pounds. Boats in e higher latitudes, however, were getting 14-25 pound albacore in 58-59°F (14.4-15.0°C) waters.

Waters off central and southern California produced few fish. Most of the sportboats om San Pedro and San Diego have stopped fishing for albacore while commercial catches were all and scattered.

The American Fishermen's Research Foundation's chartered jigboats departed San Diego on ly 16, worked from San Diego to Guadalupe Island and moved northward to northern California and egon. Catches have been small with only a few exceptions.

On July 27 one boat caught 93 fish about 150 miles west of Point Arena and on July 29 other boat caught 126 fish approximately 100 miles off Newport. Except for the 11-pound erage for albacore caught west of Newport, most of the fish caught by the three chartered boats re 6-7 pounds. As of July 30, the chartered boats have caught a total of 540 fish of which were tagged.

Sea surface temperature off the North American coast rose rapidly during the last half July. Normal warming was exceeded by as much as 4°F (2.2°C) in the vicinity of C. Blanco and ound the Channel Islands. The excess warming reversed the relatively cool conditions which d persisted through the spring and early summer and temperatures are above normal along the tire coast, except in the area between Pt. Conception and Monterey Bay. Offshore temperatures st of 127°W, between latitudes 40° and 50°N remain below normal.

According to the Long Range Prediction Group of the National Weather Service, air mperatures in the Pacific Northwest and California valleys are expected to be relatively cool ring August, along with a weakening of the surface thermal low over southwest deserts. The essure pattern should show an intensification of the upper level trough over the Pacific coast, rthward of 35°N. This should be accompanied by weaker-than-normal northerly winds along the ast and reduced upwelling. The reduced wind conditions would be favorable for fishing.

uly 31, 1974

Staff, Albacore Fishery Investigations
R. Michael Laurs, Leader